

What is claimed is:

1. Apparatus for processing video comprising:
 - 5 a segmenter for segmenting video sequences;
 - a video processor for processing the video segments of the video sequences and identifying common attributes between video segments; and
 - 10 a database for storing processed segments of the video sequences, where a plurality of processed video segments are linked via the identified common characteristics.
2. The apparatus of claim 1 further comprising:
 - a DVD authoring tool.
- 15 3. The apparatus of claim 2 wherein said DVD authoring tool provides interactive links between video segments.
4. The apparatus of claim 3 wherein said interactive links are based upon at least one attribute of said video segments.
- 20 5. The apparatus of claim 1 further comprising:
 - a web page authoring tool.
6. The apparatus of claim 5 wherein said web page authoring tool provides interactive links between video segments.
- 25 7. The apparatus of claim 6 wherein said interactive links are based upon at least one attribute of said video segments.
- 30 8. The apparatus of claim 1 further comprising:
 - a low resolution video compressor; and
 - a high resolution video compressor.

9. The apparatus of claim 1 further comprising:
a temporary storage, coupled to said at least one video compressor, for
storing said video sequence

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10. The apparatus of claim 1 wherein said video processor further
comprises:
a signal enhancer, coupled to said temporary storage, for enhancing
the video sequence.

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11. The apparatus of claim 10 wherein the signal enhancer comprises one
or more circuits selected from the group of circuits comprising noise
reduction, resolution enhancement, image stabilization, deinterlacing, and
brightness and color control.

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12. A method of image processing comprising:
segmenting a video sequence into video clips;
storing said video clips in a database with an associated unique
identifier;

20 storing said video clips in said database;
indexing said stored video.

13. The method of claim 12 further comprising:
accessing said database using a web page authoring tool to organize
25 said video clips.

14. The method of claim 13 wherein said web page authoring tool provides
interactive links between video clips.

30 15. The method of claim 14 wherein said interactive links are based upon at
least one attribute of the video clip.

16. The method of claim 8 further comprising:
compressing said video clips and said video sequence using a high
resolution compressor;

5 a DVD authoring tool for organizing said compressed video clips and
video sequence onto a DVD.

17. The method of claim 16 wherein said DVD authoring tool provides
interactive links between compressed video clips.

10 18. The method of claim 17 wherein said interactive links are based upon at
least one attribute of the compressed video clip.

19. The method of claim 12 further comprising:
adding ancillary data to said video clips.

15 20. The method of claim 19 wherein the ancillary data is an annotation.

21. The method of claim 19 wherein the ancillary data is an index to other
video clips having similar attributes.

20 22. The method of claim 12 further comprising:
enhancing the stored video clips.

25 23. The method of claim 22 wherein said enhancing further comprises:
reducing image noise in said video clips.

24. The method of claim 23 wherein said step of reducing image noise
further comprises:
aligning images in an image sequence within the video clip;
averaging pixels in said aligned images over time;
30 performing a temporal fast Fourier transform on said averaged pixels
to produce a control signal;

controlling a filter using said control signal;
filtering said image sequence.

25. The method of claim 22 wherein said enhancing step further comprises:

5 deinterlacing images in said video clip.

26. The method of claim 25 wherein said deinterlacing step further comprises:

aligning a first image field to a second image field of an interlaced
10 scanned image sequence within said video clip to produce a flow field;
adding a one-half pixel vertical motion to said flow field;
warping said second image field using said flow field;
interleaving said warped second field with said first field;
outputting a progressively scanned frame.

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27. A method of deinterlacing an image sequence comprising:

aligning a first image field to a second image field of an interlaced
scanned image sequence to produce a flow field;
adding a one-half pixel vertical motion to said flow field;
20 warping said second image field using said flow field;
interleaving said warped second field with said first field;
outputting a progressively scanned frame.

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